

Reflections on June 2010 Internship Field-based Activities

As a practicing Director of Technology in La Vernia ISD, my Internship activities are naturally somewhat different from those of the typical student. After discussing the best course of action with Dr. Abernathy, we agreed that under the guidance of my Mentor, LVISD Superintendent Dr. Tom Harvey, I would pick tasks that I perform as a part of my duties, but examine them with a critical eye towards which ISTE Technology Facilitator (TF) Standards and Performance Indicator they address. Additionally, two separate, special technology tasks are designated as Internship Projects.

During June, I spent most of my time updating and upgrading servers and District network infrastructure. In particular, a good amount of time was spent trying to mitigate or remedy conflicts between our new Meru 802.11n Wireless Ethernet systems and the wireless network cards in some of the older devices; these problems were resolved once the issue was understood. This is typical of the unknown issues that arise as technology advances; Williamson and Redish (2009) point out that sometimes "...technology uses will evoke new types of situations, and technologists will operate in areas lacking clear guidelines. In these cases, technology facilitators must forge new ground" (p. 123). A new policy resulted from this experience dealing with the type of wireless network cards and devices, particularly related to their age, that will be supported on our network.

My other tasks in June included performing my periodic website review and update, and meeting with vendors regarding our ongoing Server Virtualization Project. Both of these tasks helped me meet Performance Indicator TF-V.D, using technology to communicate and collaborate with peers, parents, and the larger community in support of student learning.

Eventually, the Server Virtualization Project will lead to the ability of teachers and students to access our network, and their specific virtual desktop, anywhere/anytime, even from home. Johnson, Smith, Levine and Haywood (2010) speak to the changing nature of educational technology by noting that “Traditionally, a learning environment has been a physical space, but the idea of what constitutes a learning environment is changing. The ‘spaces’ where students learn are becoming more community-driven, interdisciplinary, and supported by technologies that engage virtual communication and collaboration” (p. 4).

The Virtualization Project, coupled with the network upgrade tasks, made me keenly aware of the need for our wired and wireless networks and server infrastructure to support all the tools and media formats necessary for media production; Garrison (1999) explains that “Media production engages and excites; it leads to unexpected discoveries, increased self-awareness and esteem, sharpened critical thinking, analytical skills, group work skills, and ability to communicate ideas” (p. 1).

While reflecting on the month’s activities, I gained a deeper understanding of the true depth of Performance Indicator TF-VI.E, which dictates that I must act to facilitate equitable access to technology resources for all students, and Performance Indicator TF-VII.A, requiring me to insure that my teachers can use the school technology facilities and resources to implement classroom instruction. This connects to my past learning as I am well aware, based on the emphasis that the Texas LRPT puts on infrastructure, that reliable infrastructure is essential to the implementation of technology in instruction. My future learning has been impacted by my need to learn more about the ways that teacher and student-owned personal electronic devices, such as iPods and smart phones, can interfere with our network; I have built in support for the

use of these devices in both policy and infrastructure, but I must monitor their use to insure that older, outdated devices do not interfere with or slow down our network.

Viewing my performance on these tasks from an educator's point of view, I learned that I must work harder, and perform more research, in order to better anticipate potential interference in an increasingly wireless network. My performance during these tasks was impacted by my unfamiliarity with the tendency of older, 802.11a/b wireless devices to interfere with an 802.11n network by causing all devices to fall back to the older speed standards; I now realize I must seek additional training regarding wireless networking best practices in order to better support District learning goals. Based on these activities, I will take new knowledge of the intricacies of wireless networking protocols to future contexts.

As a learner, I gained a new respect for the intricacies of modern wireless networking; as bandwidth and operating frequencies increase, and as students and teachers bring in their own devices, there is more potential for unforeseen communication difficulties than there was when only our equipment was operating on the slower but more robust wireless networks common three-to-five years ago. I was effective as a learner, however, as I adapted to the situation, applied new knowledge and acquired new skills to resolve the issue.

I will transfer my learning to new situations as I endeavor to keep abreast of new technology trends and requirements, in fulfillment of Performance Indicator TF-I.A, which I meet by demonstrating my knowledge, skills, and an understanding of new concepts related to technology.

As a lifelong learner, I must perform further research regarding best practices for supporting a wide variety of student-owned and teacher-owned devices on our network from the

infrastructure perspective, as I want our students and teachers to freely use their own wireless technology tools in support of teaching and learning.

References:

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